David Canright
Publications and Presentations

Books

M.K. Smith, M.J. Miksis, G.B. McFadden, G.P. Neitzel and D. Canright (editors), *Interfaces for the 21st Century*, Imperial College Press, London, 2002.

Chapters In Books   none

Refereed Journal Papers

S. Morris and D. Canright, "A Boundary-Layer Analysis of Bénard Convection in a Fluid of Strongly Temperature-Dependent Viscosity," *Physics of the Earth and Planetary Interiors* **36**:355-373, 1984.

D. Canright and S. H. Davis, "Similarity Solutions for Phase-Change Problems," *Metallurgical Transactions* **20A**:225-235, 1989.

C. L. Scandrett and D. Canright, "Acoustical Interactions in Arrays of Spherical Elastic Shells," *Journal of the Acoustical Society of America* **90**:589-595, 1991.

D. Canright and S. H. Davis, "Buoyancy Effects of a Growing, Isolated Dendrite," *Journal of Crystal Growth* **114**:153-185, 1991.

D. Canright and S. H. Davis, "Buoyant Convection near a Solidifying Dendrite," in S. H. Davis et al. (editors), *Interactive Dynamics in Convection and Solidification* 77-80, Kluwer, Boston, 1992.

D. Canright and S. Morris, "Buoyant Instability of a Viscous Film Over a Passive Fluid," *Journal of Fluid Mechanics* **255**:349-372, 1993.

D. Canright, "Estimating the Spatial Extent of Attractors of Iterated Function Systems," *Computers and Graphics* **18**:231-238, 1994.

D. Canright, "Thermocapillary Flow Near a Cold Wall," *Physics of Fluids* **6**:1415-1424, 1994.

C. L. Scandrett and D. Canright, "Low Frequency Active Array Calculations in a Shallow Channel," *Journal of the Acoustical Society of America* **96**:557-563, 1994.

P. Beaver and D. Canright, "The Quasimonotonicity of Linear Differential Systems," *Applicable Analysis* **70(1–2)**:67-73, 1998.

P. Beaver and D. Canright, "The Quasimonotonicity of Linear Differential Systems— The Complex Spectrum," *Applicable Analysis* **80**:127-131, 2002.

D. Canright and M. Huber, "A Boundary-Layer Model of Thermocapillary Flow in a Cold Corner," *Physics of Fluids* **14(9)**:3272-3279, 2002.

Non-Refereed Journal Papers   none

Refereed Conference Papers

D. Canright, V. Henson, "Towards and FAC-FVE Approach to Determining Thermocapillary Effects on Weld Pool Shape," Copper Mountain Conference on Multigrid Methods, Copper Mountain, CO, 4-9 April. (Paper published in the conference proceedings, 1995.)

Invited Conference Papers

D. Canright, "Maple in Discretizing Equations by the Finite Volume Element Method," Conference on Maple V & Theorist, Stockton, CA, 10-13 August, 1995.

D. Canright, "Calculus I with Maple V," Conference on Maple V & Theorist, Stockton, CA, 10-13 August, 1995.

Presentations

S. Morris and D. Canright, "A Systematic Treatment of Cellular Convection with Rheological Boundary-Layers," 14th International Conference on Mathematical Geophysics, Loen Norway 24-30 June. (Abstract published in 1984 *TERRA Cognita* **4**: 243, 1984.)

D. Canright and S. Morris, "Nonlinear Analysis of the Rayleigh-Taylor Instability in Creeping Flow," 39th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Columbus OH 23-25 November. (Abstract published in 1986 *Bulletin of the American Physical Society* **31**(10):1695, 1986.)

D. Canright and S. Morris, "Nonlinear Analysis of the Buoyant Instability of a Thermoviscous Fluid below an Impulsively Cooled Boundary," 40th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Eugene OR 22-24 November. (Abstract published in 1987 *Bulletin of the American Physical Society* **32**(10):2055, 1987.)

D. Canright and S.H. Davis, "Similarity Solutions for Solidification with Convection," 41st Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Buffalo NY 20-22 November. (Abstract published in 1988 *Bulletin of the American Physical Society* **33**(10):2291, 1988.)

D. Canright and S.H. Davis, "Buoyant Convection near a Solidifying Paraboloid," Annual Meeting of the Society for Industrial and Applied Mathematics, San Diego CA 17-21 July. (Abstract published in the meeting Final Program, 1989.)

D. Canright, "Musical Aperiodic Binary Sequences," Annual Meeting of the Society for Industrial and Applied Mathematics, Chicago IL 16-20 July. (Abstract published in the meeting Final Program, 1990.)

D. CANRIGHT AND S.H. DAVIS, "Buoyant Convection near a Solidifying Dendrite," 43rd Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Ithaca NY 18-20 November. (Abstract published in 1990 *Bulletin of the American Physical Society* **35**(10):2237, 1990.)

C. SCANDRETT AND D. CANRIGHT, "Acoustical Interactions in Arrays of Spherical Elastic Shells," Second International Conference on Industrial and Applied Mathematics, Washington DC 8-12 July. (Abstract published in the conference Final Program, 1991.)

D. CANRIGHT AND S.H. DAVIS, "Buoyant Convection near a Solidifying Dendrite," Interactive Dynamics in Convection and Solidification (NATO workshop), Chamonix, France, 7-14 March. (Paper published in the conference proceedings, 1992.)

D. CANRIGHT, "Thermocapillary Convection Near a Cold Wall," 45th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Tallahassee FL 22-24 November. (Abstract published in 1992 *Bulletin of the American Physical Society* **37**(10):1785-1786, 1992.)

D. CANRIGHT, V. HENSON, AND E. LITAKER, "Thermocapillary Flow in a Weld Pool: A Finite Volume Element Approach," 47th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Atlanta GA 20-22 November. (Abstract published in 1994 *Bulletin of the American Physical Society* **39**(9):1977, 1994.)

D. CANRIGHT, "Calculus with Maple V," MAA Joint Northern and Southern California Section Meeting, 21 October, 1995.

D. A. DANIELSON, D. CANRIGHT, D. N. PERINI, AND P. W. SCHUMACHER, JR., "The Naval Space Command Automatic Differential Correction Process," AAS/AIAA Astrodynamics Specialist Conference, Girdwood, Alaska, 16-19 August. (Paper to appear in the conference proceedings, 1999.)

M. A. COUCH, E. R. WOOD, AND D. CANRIGHT, "Incorporating Unsteady Aerodynamics into Nonlinear Rotor Dynamics Simulations," 43rd AIAA/ASME/ASCE/AHS Structures, Structural Dynamics, and Materials Conference, Denver, Colorado, 22-25 April, 2002.

D. CANRIGHT AND M. HUBER, "Boundary-Layer Model for Thermocapillary Feedback Near a Cold Wall," SIAM 50th Anniversary and 2002 Annual Meeting, Philadelphia, Pennsylvania, 8-12 July, 2002.

D. CANRIGHT AND M. HUBER, "Thermocapillary Feedback Near a Cold Wall: A Boundary-Layer Model," 55th Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, Dallas TX, 24-26 November. (Abstract published in 2002 *Bulletin of the American Physical Society* **47**(10):197, 2002.)

Refereed Technical Reports   none

Non-Refereed Technical Reports

D. CANRIGHT AND S. MORRIS, "Rayleigh-Taylor Instability of a Viscous Film Overlying a Passive Fluid," Naval Postgraduate School Technical Report: NPS-53-89-012, 1989.

D. CANRIGHT AND S. H. DAVIS, "Buoyant Convection in Dendritic Solidification," Naval Postgraduate School Technical Report: NPS-53-90-005, 1990.

D. CANRIGHT, "Analysis of Thermocapillary Convection in Welding," Naval Postgraduate School Technical Report: NPS-MA-93-011, 1993.

D. CANRIGHT, "Estimating the Spatial Extent of Attractors of Iterated Function Systems," Naval Postgraduate School Technical Report: NPS-MA-93-017, 1993.

D. A. DANIELSON AND D. CANRIGHT, "Documentation of the Naval Space Command Automatic Differential Correction Process," Naval Postgraduate School Technical Report: NPS-MA-00-001, 1999.

Published Computer Programs

D. CANRIGHT, "Fractal Editor (FrEd)," educational computer program published as freeware (available from <http://members.telocity.com/~acanright/>), 1992.

D. CANRIGHT, "Public Key Encryption (PKE)," educational computer program published as freeware (available from <http://members.telocity.com/~acanright/>), 1998.

Book Reviews

D. CANRIGHT, "Review of MDEP," *C·ODE·E* Fall:13-14, 1992. (software review)

Other (articles on mathematics of musical harmony)

D. CANRIGHT, "On Piano Retuning," *1/1, the Journal of the Just Intonation Network* **1(4)**:10ff, 1985.

D. CANRIGHT, "Pentatonics I Have Known," *1/1, the Journal of the Just Intonation Network* **1(2)**:1ff, 1985.

D. CANRIGHT, "Rational Notation," *1/1, the Journal of the Just Intonation Network* **1(1)**:8ff, 1985.

D. CANRIGHT, "A Justly-Tuned Guitar," *1/1, the Journal of the Just Intonation Network* **2(2)**:8ff, 1986.

D. CANRIGHT, "A Tour Up The Harmonic Series," *1/1, the Journal of the Just Intonation Network* **3(3)**:8ff, 1987.

D. CANRIGHT, "Harmonic-Melodic Diagrams," *1/1, the Journal of the Just Intonation Network* **4(2)**:1ff, 1988.

D. CANRIGHT, "Fibonacci Gamelan Rhythms," *1/1, the Journal of the Just Intonation Network* **6(4)**:4ff, 1990.

D. CANRIGHT, "Superparticular Pentatonics," *1/1, the Journal of the Just Intonation Network* **9(1)**:10ff, 1995.

D. CANRIGHT, "Fret Choices for Just Intonation Guitars (or Fretting About Fretting)," *1/1, the Journal of the Just Intonation Network* **10(3)**:18ff, 2002.